	COOLING TOWER SCHEDULE												
		GPM	MAX. P.D.	TEMPERATURES °F			FAN MOTOR			FAN			
NO.	NO. LOCATION	NO. CELLS	EACH CELL	FT. WATER	AIR Wb	WATER IN	WATER OUT	RPM	NOM. HP	PHASE VOLT	RPM	TIP SPEED (FPM)	
31-CT-1	ROOF	1	3335	21	80	95	85	1800	1 @ 100	3-480	297	10258	
31-CT-2	ROOF	1	3335	21	80	95	85	1800	1 @ 100	3-480	297	10258	
31-CT-3	ROOF	1	3335	21	80	95	85	1800	1 @ 100	3-480	297	10258	

	WATER COOLED CHILLER SCHEDULE														
				MAX. KW PER TON	COMPRESSOR MOTOR			EVAPORATOR				CONDENSER			
UNIT	LOCATION	MIN.	NPLV					ENT.	LVG.	LVG.		ENT.	LVG.		
NO.	LOCATION	TONS			HP INPUT	PHASE VOLT	GPM	WATER TEMP. °F	WATER TEMP. °F	MAX. P.D.	GPM	WATER TEMP. °F	WATER TEMP. °F	P.D.	
31-CCU-1	BUILDING 31	1200	0.364	0.599	889	3-4160	2397	54	42	14.8	3335	85	95	20.4	
31-CCU-2	BUILDING 31	1200	0.364	0.599	889	3-4160	2397	54	42	14.8	3335	85	95	20.4	
31-CCU-3	BUILDING 31	1200	0.364	0.599	889	3-4160	2397	54	42	14.8	3335	85	95	20.4	

	HVAC PUMP SCHEDULE												
				С	IRCULATING F	LUID			MOTOR				
PUMP NO.	LOCATION	SYSTEM	FLUID	GPM	PUMP HEAD FT FLUID	TEMP. °F	SP. GR.	% EFF.	TYPE	NOM. HP	PHASE- VOLT	RPM	
31-P-1	BUILDING 31	CHILLED WATER RETURN	WATER	2400	45	54	1	78.92	VSCS	40	3-480	1780	
31-P-2	BUILDING 31	CHILLED WATER RETURN	WATER	2400	45	54	1	78.92	VSCS	40	3-480	1780	
31-P-3	BUILDING 31	CHILLED WATER RETURN	WATER	2400	45	54	1	78.92	VSCS	40	3-480	1780	
31-P-4	BUILDING 31	COOLING TOWER WATER	WATER	3335	80	85	1	81.43	VSCS	100	3-480	1780	
31-P-5	BUILDING 31	COOLING TOWER WATER	WATER	3335	80	85	1	81.43	VSCS	100	3-480	1780	
31-P-6	BUILDING 31	COOLING TOWER WATER	WATER	3335	80	85	1	81.43	VSCS	100	3-480	1780	
31-P-7	BUILDING 31	CHILLED WATER SUPPLY	WATER	3600	100	42	1	83.74	VSCS	125	3-480	1780	
31-P-8	BUILDING 31	CHILLED WATER SUPPLY	WATER	3600	100	42	1	83.74	VSCS	125	3-480	1780	
31-P-9	BUILDING 31	CHILLED WATER SUPPLY	WATER	3600	100	42	1	83.74	VSCS	125	3-480	1780	
31-PF-1	BUILDING 31	COOLING TOWER FILTER	WATER	400	-	85	1	-	-	15	3-480	-	

ALL ITEMS THAT REQUIRE ACCESS, SUCH AS FOR OPERATING, CLEANING, SERVICING, MAINTENANCE AND CALIBRATION, SHALL BE EASILY AND SAFELY ACCESSIBLE BY PERSONS STANDING AT FLOOR LEVEL, OR STANDING ON PERMANENT PLATFORMS, WITHOUT THE USE OF PORTABLE LADDERS. EXAMPLES OF THESE ITEMS INCLUDE, BUT ARE NOT LIMITED TO: ALL TYPES OF VALVES, FILTERS AND STRAINERS, TRANSMITTERS, CONTROL DEVICES. PRIOR TO COMMENCING WORK, REFER CONFLICTS BETWEEN THIS

REQUIREMENT AND CONTRACT DRAWINGS TO THE RE/COTR FOR RESOLUTION.

Jul 27, 2009 - 2:17pm
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jokama
one eighth inch = one foot
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WATER FLOW MEASURING DEVICE SCHEDULE										
UNIT NO.	LOCATION	SYSTEM	SERVICE	TYPE	CAPACITY GPM	SIZE IN	REMARKS			
31-WFM-1	BUILDING 31	CHILLED WATER	31-CCU-1	VENTURI	2397	12				
31-WFM-2	BUILDING 31	CHILLED WATER	31-CCU-2	VENTURI	2397	12				
31-WFM-3	BUILDING 31	CHILLED WATER	31-CCU-3	VENTURI	2397	12				
31-WFM-4	BUILDING 31	COOLING TOWER WATER	31-CCU-1	VENTURI	3335	12				
31-WFM-5	BUILDING 31	COOLING TOWER WATER	31-CCU-2	VENTURI	3335	12				
31-WFM-6	BUILDING 31	COOLING TOWER WATER	31-CCU-3	VENTURI	3335	12				
31-WFM-7	BUILDING 31	CHILLED WATER	PRIMARY DISTRIBUTION LOOP	VENTURI	7200	18				

CONTROL VALVE SCHEDULE											
UNIT NO.	SIZE	TYPE	ACTUATION	BASIS OF DESIGN	CONTROL						
CV-1	12"	TWO / POSITION	ELECTRIC	BELIMO: F612HSAFSY4120S	DI/DO W/ MAN. OVR						
CV-2	12"	TWO / POSITION	ELECTRIC	BELIMO: F612HSAFSY4120S	DI/DO W/ MAN. OVR						
CV-3	12"	TWO / POSITION	ELECTRIC	BELIMO: F612HSAFSY4120S	DI/DO W/ MAN. OVR						
CV-4	12"	TWO / POSITION	ELECTRIC	BELIMO: F612HSAFSY4120S	DI/DO W/ MAN. OVR						
CV-5	12"	TWO / POSITION	ELECTRIC	BELIMO: F612HSAFSY4120S	DI/DO W/ MAN. OVR						
CV-6	12"	TWO / POSITION	ELECTRIC	BELIMO: F612HSAFSY4120S	DI/DO W/ MAN. OVR						
CV-7	12"	TWO / POSITION	ELECTRIC	BELIMO: F612HSAFSY4120S	DI/DO W/ MAN. OVR						
CV-8	12"	TWO / POSITION	ELECTRIC	BELIMO: F612HSAFSY4120S	DI/DO W/ MAN. OVR						
CV-9	12"	TWO / POSITION	ELECTRIC	BELIMO: F612HSAFSY4120S	DI/DO W/ MAN. OVR						
CV-10	12"	TWO / POSITION	ELECTRIC	BELIMO: F612HSAFSY4120S	DI/DO W/ MAN. OVR						
CV-11	12"	TWO / POSITION	ELECTRIC	BELIMO: F612HSAFSY4120S	DI/DO W/ MAN. OVR						
CV-12	12"	TWO / POSITION	ELECTRIC	BELIMO: F612HSAFSY4120S	DI/DO W/ MAN. OVR						
CV-13	12"	3-WAY MOD	ELECTRIC	BELIMO: F712HSAF-120SRS-D11	2-10 VDC						
CV-14	12"	3-WAY MOD	ELECTRIC	BELIMO: F712HSAF-120SRS-D11	2-10 VDC						
CV-15	12"	3-WAY MOD	ELECTRIC	BELIMO: F712HSAF-120SRS-D11	2-10 VDC						
CV-16	12"	TWO / POSITION	ELECTRIC	BELIMO: F612HSAFSY4120S	DI/DO W/ MAN. OVR						
CV-17	12"	TWO / POSITION	ELECTRIC	BELIMO: F612HSAFSY4120S	DI/DO W/ MAN. OVR						
CV-18	12"	TWO / POSITION	ELECTRIC	BELIMO: F612HSAFSY4120S	DI/DO W/ MAN. OVR						
CV-19	12"	TWO / POSITION	ELECTRIC	BELIMO: F612HSAFSY4120S	DI/DO W/ MAN. OVR						
CV-20	12"	TWO / POSITION	ELECTRIC	BELIMO: F612HSAFSY4120S	DI/DO W/ MAN. OVR						
CV-21	12"	TWO / POSITION	ELECTRIC	BELIMO: F612HSAFSY4120S	DI/DO W/ MAN. OVR						
CV-22	6"	TWO / POSITION	ELECTRIC	BELIMO: F606HSAFSY4120S	DI/DO W/ MAN. OVR						
CV-23	6"	TWO / POSITION	ELECTRIC	BELIMO: F606HSAFSY4120S	DI/DO W/ MAN. OVR						
CV-24	6"	TWO / POSITION	ELECTRIC	BELIMO: F606HSAFSY4120S	DI/DO W/ MAN. OVR						
CV-25	6"	TWO / POSITION	ELECTRIC	BELIMO: F606HSAFSY4120S	DI/DO W/ MAN. OVR						
CV-26	6"	TWO / POSITION	ELECTRIC	BELIMO: F606HSAFSY4120S	DI/DO W/ MAN. OVR						
CV-27	6"	TWO / POSITION	ELECTRIC	BELIMO: F606HSAFSY4120S	DI/DO W/ MAN. OVR						

1. PROVIDE ALL VALVES WITH OPTIONAL LOCAL DISCONNECT.

2. PROVIDE ALL VALVES WITH NEMA 4 INDUSTRIAL ACTUATOR WITH MANUAL HANDWHEEL.

3. PROVIDE ALL VALVES WITH TWO (2) BUILT-IN AUXILIARY SWITCHES.

	CONSULTANTS:			ARCHITECT/ENGINEERS:		Drawing Title SCHEDULES	Project Title	Project Number 642-09-22	Office of
			NWEA()	Mechanical, Electrical, Fire Protection, and Plumbing Engineer		MAIN CHILLER PLANT UPGRADE	Building Number 31	Construction and Facilities	
			JENNINGS L. DAVIS II	H.F. Lenz Company 1407 Scalp Avenue Johnstown, PA 15904-3314	Approved: Project Director	Location PHILADELPHIA, PA 19104	Drawing Number	Management	
Revisions: Date		KEY PLAN	NO. PEO62186	Johnstown, PA 15904-3314 T: 814.269.9300 F: 814.269.9301		Date Checked Drawn 10-JUNE-09 JLD CRE	MH601 Dwg of X	Department of Veterans Affai	

ISSUED FOR BID